TROUBLE TICKET

CONTENTS PAGE

1.0 GENERAL 1
2.0 TROUBLE CLASSES (SOURCE) 2
3.0 TROUBLE CODES (TYPE) 2
4.0 MAKING NON-TSPS TICKET COMPATIBLE 3
5.0 DETAILS OF TROUBLE TICKET 4
Attachment: 1. Trouble Ticket Format
2. Non-TSPS Trouble Format for Transmission

1.0 GENERAL

1.01 A DDD Service Bureau should receive a continuous flow of reports of ineffective call attempts. This Section describes the preparation of a standard trouble ticket which can be used to record the various types of information, and how to merge them for analysis purposes.

1.02 The information is received from various sources and consists of verbal trouble reports, written trouble tickets, punched IBM or trouble recorder cards, and printed lists.

1.03 While the procedures for ***receiving*** the operator trouble reports will vary, the trouble ticket must be the means (TSPS excluded) used for placing the information into a computer for assembly and listing or for sorting and listing mechanically.

1.04 The ticket is created in one of two ways —

(1.) Operator or Bureau clerk mark sense.

(2.) Mechanically key punched as the report is received from the switchboard.

1.05 Mark sense and punched card optical scanning devices are available for reading either ticket and converting it to data impulses, transmitting it to an assembly point, and merging it with other data for analysis.

1.06 In order to utilize the proposed centralized TSPS computer for the assembly of all input data, the use of standard trouble coding and classifications as mentioned in BSP 660-621-010 is recommended. (See paragraph 2.0 and 3.0)

1.07 Non-TSPS locations can use the same standard coding and input their trouble data into the same assembly point used by TSPS users.

1.08 Standard coding, classifications, and format will allow a central assembly point to merge data from all Bureaus and provide call failure information for each Bureau's prime area.

1.09 Pending the availability of a centrally located assembly point of this type, local arrangements are used for processing of the trouble ticket.

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2.0 TROUBLE CLASSES (SOURCE)

2.01 BSP 660-621-010 specifies that the source codes of trouble reports be identified using the tens digit of a two (2) digit code as follows –

SOURCE CODE	SOURCE	ABBREV.
0	International or Overseas Operator	OVSO
1	Operator Using Tandem Trunk or TSP (S) Operators	OPRT
2	Operator Using Direct Trunk	OPRD
3	Service Observer	SOBS
4*	Dial Service Assistance (Local Assist)	DSA
5	Customer Encountered Troubles Via Operator, PSC, Etc.	CUST
6	Dataphone DTWX and Data Service	DATA
8	TSPS Troubles Identified Toward Calling Customer (Trouble Types 3 and 5 Only)	TSPC
9	Used Locally For Identification of Originating Maintenance Problems	ORIG

*Collection & analysis of DSA reports by DDD Bureau is optional

3.0 TROUBLE CODES FOR TROUBLE TYPES

3.01 BSP 660-621-010 also specifies that the following units digit be assigned for the trouble codes as shown here –

THE FOLLOWING TROUBLE TYPES ARE PROPOSED FOR SOURCES 0-6.

CODE	DESCRIPTION	ABBREV.
0	Wrong Number or Reached Intercept Improperly.	WNO
1	No Ring, No Answer	NRNA
2	Noisy, Crosstalk, or Garble (Note 1)	NXT
3	Can't Hear or Can't Be Heard	CHBH
4	Improper (False) Supervision (Note 2)	FS
5	Cut Off	CTO
6	Reorder or Announcement	RO
7	Ring No Answer or No Operator Answer	RNA
8	(Reserved For Special Studies) (Note 3)	
9	Other	

Note 1: For Data Services (Class 6) trouble type 2 will be translated GARB.

Note 2: For Data Services (Class 6) trouble type 4 will represent a false busy and will be translated FB.

Note 3: For Data Services, (Class 6) trouble type 8 may be used for ring trip no answer and will be translated RTNA.

Optional Class 9 troubles (originating TSPS maintenance problems) should be separately summarized on an originating basis but will not be inter-exchanged since the troubles are known to be of an originating nature. In those locations where this class is used, the following trouble codes are assigned.

OBVIOUS ORIGINATING TROUBLES

CLASS	CODE	DESCRIPTION	ABBREV.
9	0	ANI Failure	ANIF
9	1	Positions Crossed	TSPX
9	2	FR Customer Comes In With Coin Indication	FROC
9	3		
9	4		
9	5		
9	6		
9	7		
9	8		
9	9		

3.02 Where conflicts with existing mark sense or mechanized systems exist reformating of non-TSPS trouble reports will be required.

4.0 MAKING NON-TSPS TICKET COMPATIBLE

4.01 The sample trouble ticket shown in attachment #1 has been prepared showing the information which is required for a complete analysis job. The amount of information which can be handled efficiently by a Bureau is determined of course to a great extent by the method used for processing and summarizing the information.

4.02 Locations preparing trouble tickets mechanically from operator key sets can punch 80 columns of information on the IBM card. Those Bureaus using a mark sense operation will be limited to 27 mark sense columns on each side of a mark sense card. This provides 54 columns of data when the mark sense card is read and reverse punched.

4.03 Since TSPS reporting is limited to the amount of data available from the base unit, only 34 bytes of information plus control information are available.

4.04 Non-TSPS input can be arranged on the trouble ticket, using standard codes, so that the information read is in the order recommended for computer input from non-TSPS source. (See Attachment #2)

4.05 Since only 34 columns of data are used when merging non-TSPS with TSPS data, the 80 column mechanically produced operator trouble ticket can be inserted in a card reader and the proper number of columns read from left to right and transmitted.

4.06 Mark sense tickets will require marking on both sides and mark sense reading and punching into an 80 column format with 34 columns in the order shown on Attachment #2. (Attachment #1 – Front side shows same information on the bottom columns 2 through 35).

5.0 DETAILS OF TROUBLE TICKET

5.01 To meet the requirements for the exchange of information between all Network Analysis Bureaus and Area Network Service Centers (Long Lines) Attachment #1 represents a typical trouble ticket format. The information is arranged on the ticket to allow merging of non-TSPS data operator reports with TSPS computer input. The various columns contain information which is either written (for local analysis and control) or mark sensed or key punched as follows –

FRONT SIDE

Miscellaneous – For Local use – serial number etc.

Time Received – Time reported to Bureau clerk or recorders.

Time Released – Time held connection was released, or decision made not to trace.

Elapsed Time – Difference between received and released time – used to calculate and control traces over 30 minutes. If desired, elapsed time could be mark sensed on back of card for machine analysis.

Operator Position – To identify location of held connection on traces, and to analyze reports of improper supervision. (Position Troubles)

Trunk Group and Number – For identifying inter-toll and toll-connecting trunk reported on traces or lockouts.

Other – Other data as required

Recorded By – Initials of report receiving clerk – used for accuracy audits.

Traced By – Initials of person in Bureau controlling traced – used for training purposes.

Operator Unit (M.S. Columns #6 & #7) – Two digit code for switchboard from which report was received. Used for originating listing by switchboards for originating analysis. Used to identify other report sources ie other Bureaus, P.S.C., Employee, etc.

Trouble Class-Source and Type (M.S. Columns #8 & #9) – Source and nature of trouble report.

Number Dialed (M.S. Columns #10 to #19) – Number as dialed – code compression can be used on HNPA calls. Area not used on DSA reports. On service observing failures show only thousands and hundreds operator code.

Calling Number or Trunk Group and Number (M.S. Columns #20 to #27 #1 & #2) – Calling number if customer report – Trunk Group No. In M.S. Columns #26 & #27 on front and M. S. Columns #1 & #2 on reverse side

REVERSE SIDE

Trunk Number (M.S. Columns #3 to #6) – Number of trunk selected in multiple

Date (M.S. Columns #7 to #10) -- Calendar Date

Time (M.S. Columns #11 to #14) – 24 Hour Clock Time

Disposition (–M.S. Column #15) – Disposition of trouble report

0 - Pattern
1 - Hold for analysis
2 - Abandoned trace
3 - NTF – Toll Center
4 - TF – Toll Center
5 - Abnormal condition
6 - Referred Out
7 - NTFT – Tributary
8 - TFT – Tributary
9 - Other

Result Location (M.S. Column #16 to #18) – Destination of report – combined with disposition code to show disposition & location of reports for use on detail of reports & traces. Generally represents maintainence responsibility for toll center in which NNX is located, or foreign Bureau or NPA. Used to accumulate results from toll center to district, to division, area, and company levels. (If more columns are required "remarks" space can be reduced)

Special Analysis (M.S. Columns #19 & #20) – To assist in TF & NFT analysis. TF is to show type of trouble found – NTF shows condition found. Examples ***Suggested*** are as follows –

NO TROUBLE FOUND

00. 1st. sel. seized – not stepped
01. 1st. sel. on wrong level
02. Aux. 1st. sel. seized – not stepped
03. Aux. 1st. sel. on wrong level
04. 2nd. sel. seized – not stepped
05. 2nd. sel. on wrong level
06. 3rd. sel. seized – not stepped
07. 3rd. sel. on wrong level
08. 4th. sel seized – not stepped
09. 4th sel. on wrong level
10. 5th. sel. seized – not stepped
11. 5th. sel. on wrong level
12. Connector seized – not stepped
13. Connector vertical – no rotary (missed last digit)
14. Connector on wrong level
15. Wrong last digit
16. Reached number and tripped

NO TROUBLE FOUND (CON'TD)

17. Reached number and tripped – PBX
18. Intermediate digit or digits missing
19. Repeated digit or digits missing
20. Double connection – SXS
21. Switch 11th rotary step – SXS
22. Switch not seized
23. Apparent no release
24. CXR or Trunk came clear
25. Seized only Common Control
26. Rot. Switch
27. Traced to reorder
28. Operator trunks – 121-131-Inf. – Etc.
29. No cross-points – 4A
30. Stuck sender 4A
31. Wrong place 4A
32. A & D lock-up XBT
33. No cross points XBT
34. Stuck sender XBT
35. Wrong place XBT
36. A & D lockup 1 & 5 XB
37. No ring 1 & 5 XB
38. No ring panel
39. Independent common control
40. Independent SXS
41. Operator dialing
42. Stuck sender SXS
43. Stuck sender 1 & 5 XBr
44. NTF switchboard
45. Office over load

TROUBLE FOUND

39. #1 ESS – Defective Trk Unit
40. #1 ESS Relay Adj.
41. #1 ESS Phase or Interrupt
42. #1 ESS wiring (Equip.)
43. #1 ESS – Trk. Translation Error
44. #1 ESS Line Translation Error
45. #1 ESS – Oth. Translation Error
47. Traffic Operation
48. Man Made Long Lines
49. Man Made W.E.CO.
50. Man Made Wis. Tel. Co.
51. Man Made Independent Co.
52. 4A – Dirty contacts (relays etc - other than drop equip)
53. 4A – Relay and equipment adj. (other than drop equipment)
54. 4A – Wiring – broken, loose (equipment)
55. 4A – Misc. (tubes, cards etc.)
56. XBT – Dirty Contacts (relays etc. - Other than drop equip)
57. XBT – Relay and equipment adj. (other than drop equipment)
58. XBT – Wiring (equipment only)
59. XBT – Misc. (tubes, etc.)
60. #1 or #5 XB – Dirty contacts (relays) other than drop equip)
61. #1 or #5 XB – Relay and equipment adj. (other than drop equipment)
62. #1 or #5 XB – Wiring (equipment only)
63. #1 or #5 XB – Misc. (tubes, cords etc.)
64. SXS – Dirty contacts (relays etc - other than drop equip)
65. SXS – Relay adj. (other than drop equipment)
66. SXS – Switch adj. (other than relay)
67. SXS – Wiring (equipment only)
68. Panel – Dirty contact (relays etc – other than drop equipment)
69. Panel – relay and equipment adj. (other than drop equipment)
70. Panel – switch adj. (other than relay)
71. Panel – Wiring (equipment only)
72. Manual – relay trouble (dirty or adj.)
73. Manual – Switchboard – cords, jacks, lamps etc.
74. Switchboard – relay trouble, (dirty or adj)
75. Switchboard – other (cords, jacks, lamp etc.)
76. Defective Equipment replaced
77. Independent Co. – other
78. Trunk equipment Incoming and Outgoing – dirty contacts
79. Trunk equipment Incoming and Outgoing – relay adj.
80. Trunk equipment Incoming and Outgoing – wiring
81. Signal equipment (SF, CX etc.) – dirty contacts
82. Signal equipment (SF, CX etc.) – relay adj.
83. Signal equipment (SF, CX etc.) – wiring
84. Signal equipment (SF, CX etc.) – other
85. Pulse repeating equipment – dirty contacts
86. Pulse repeating equipment – relay adj.
87. Pulse repeating equipment – wiring
88. Other toll term equipment – (coils, term sets etc.)
89. Operator trunks (121, 131, etc.) – dirty contacts.

TROUBLE FOUND (CON'TD)

90. Operator trunks (121, 131, etc.) – relay adj.
91. Operator trunks (121, 131, etc.) – wiring
92. CXR – (transmission)
93. CXR – signaling
94. CXR – other (Hits etc.)
95. CXR – system failure
96. Fax trouble – (open wire, cable etc.)
97. Wiring – open, loose, etc. frame equipment cross connections
98. Subscriber line or station trouble
99. Fuse
00. Misc. common office equipment (power, ring machine etc.)

Remarks – Used for details of work error – manual collection data.

TF-NTF – Name of location – clerk converts to result location code.

Initial – Initial of tracer

CMP Ticket Number – Used C.O. review team when auditing CMP.

FRONT SIDE

MISCELLANEOUS / TIME RECEIVED	OPER. UNIT	TRBL CLASS SOURCE OVSO	TRBL CLASS TYPE WNO	NUMBER DIALED AREA CODE	NUMBER DIALED PREFIX OR OPR. CODE	NUMBER DIALED NUMBER	CALLING NO. OR - TRUNK NPA	CALLING NO. OR - TRUNK NNX	CALLING NO. OR - TRUNK T H GROUP
TIME RELEASED		OPRT	NRNA						
ELAPSED TIME		OPRD	NXT						
OPERATOR POSITION		SOBS	CHBH						
		DSA	FS						
TRUNK GRP. & NUMBER		CUST	CTO						
		DATA	RO						
OTHER INFO.		TSPC	RNA						
		ORIG	SPEC						
RECORDED BY / TRACED BY			OTH						

SOM	DATE	TIME	TBL S/T	NUMBER DIALED N+2	NUMBER DIALED NNX	NO.	CALLING NO. OR TRUNK NPA	CALLING NO. OR TRUNK NNX	CALLING NO. OR TRUNK T H GROUP	CALLING NO. OR TRUNK NUMBER	CHLP	TSPC	RNA	RESULT LOC	SPEC ANA	OPER UNIT
1	2 3 4 5	6 7 8 9	10	11 12 13 14	15 16 17	18 19 20 21	22 23 24	25 26 27	28 29 30	31 32 33 34 35 36	37	38	39	40 41	42 43	44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

REVERSE SIDE

TRUNK OR CALLING NO T U GROUP	TRUNK NUMBER	DATE MONTH	DATE DAY	TIME 24 HOUR	DISPOSITION	RESULT LOCATION	SPEC. ANALY-SIS	
					ANAL. / ABAN. / NTF / TF / ABN'M COND. / REF OUT / NTFT / TFT / OTHER			REMARKS—
								TF-NTF LOCATION / INITIAL / CMP-TICKET NUMBER

1 2 3 4 5	6 7 8 9 10 11 12 13 14 15 16 17 18	19 20 21 22 23 24	25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40 41 42	43 44 45	46 47 48 49 50 51 52 53 54	55 56 57 58 59 60

NON–TSPS TROUBLE REPORT FORMAT FOR TRANSMISSION:

Desc.	SOM	DATE				TIME				SOURCE	TROUBLE	NUMBER DIALED									
		MONTH		DAY		HOUR		MIN				NPA			NNX			STATION			
Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Notes	1									2	3	4			5						

CALLING NO. OR TRUNK										TRUNK NUMBER				CR	LF	EOM
NPA			NNX			TRUNK GROUP										
22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
6			7			8				9				10	10	1

NOTES:

1. SOM (start of message) and EOM (end of message) are standard non-printing characters on 8-level ASCII equipment.
2. See paragraph 2.0) BSP 660-621-010 Issue 2
3. See paragraph 3.0) BSP 660-621-010 Issue 2
4. HNPA must be recorded on HNPA calls.
5. NNX must be recorded on HNPA calls.
6. Customer's or operator HNPA location must be recorded.
7. Calling NNX if customer report. If operator report can be used for switchboard location code.
8. Station number if customer report. If operator report, may be used for trunk group.
9. Trunk number or name may be entered here for assistance in originating analysis.
10. CR (carriage return) and LF (line feed) are standard control characters for TTY.